

40235 Install, test, and service pneumatic or electro-pneumatic equipment

Kaupae Level	4
Whiwhinga Credit	5
Whāinga Purpose	<p>This skill standard recognises the skills required to install, test and service pneumatic and electro-pneumatic equipment used in an industrial environment.</p> <p>This skill standard may contribute to the New Zealand Certificate in Industrial Measurement and Control (Practice) (Level 4) [Ref: 2251].</p>

Hua o te ako me Paearu aromatawai | Learning outcomes and assessment criteria

Hua o te ako Learning outcomes	Paearu aromatawai Assessment criteria
1. Install and commission pneumatic or electro-pneumatic equipment.	a. The air supply is sized and conditioned to meet the equipment specification.
	b. Equipment is selected according to process conditions and accuracy requirements of the installation.
	c. Equipment is installed and commissioned to meet job and equipment specifications, and industry requirements.
2. Test pneumatic or electro-pneumatic equipment.	a. Test equipment is selected according to process conditions and accuracy requirements of the installation.
	b. Pneumatic or electro-pneumatic equipment is tested and adjusted as specified by the data sheet.
	c. Results of tests are accurately documented to meet compliance and quality requirements.
3. Service pneumatic or electro-pneumatic equipment.	a. Pneumatic or electro-pneumatic equipment is serviced to ensure correct and continued operation and to reflect manufacturer's technical information.
	b. Service outcomes are accurately documented to meet compliance and quality management requirements.

Pārongo aromatawai me te taumata paearu | Assessment information and grade criteria

Assessment specifications:

Evidence for this skill standard may include either discrete (ON/OFF) pneumatic systems, or electro-pneumatic systems such as 20-100 kPa control equipment.

To achieve this standard the candidate must be capable of consistently:

- performing the skill to the required industry standard
- repeating the skill on demand
- performing the skill without supervision
- applying the skill to other work.

Industry requirements refer to all asset owner requirements; manufacturers' specifications; enterprise requirements which cover the documented workplace policies, procedures, specifications, and business requirements; and quality management requirements relevant to the workplace.

Ngā momo whiwhinga | Grades available

Achieved

Ihirangi waitohu | Indicative content

- Safe work procedures: process isolation, loop isolation.
- Verification of air supply includes consideration of pressure regulation, dryness of air, entrained oil, & filtering of particles.
- Selection of test equipment according to accuracy and range of devices, for example, gauges, test set, electrical solenoid supply.
- Device failure modes and consequences.
- Selection of components and devices to meet job requirements.
- Commissioning of equipment.
- Installation of devices: tubing, piping, threading, mounting, sealants, isolation.
- Use of technical information for servicing equipment.
- Servicing of equipment to ensure continued operation using tools, materials, parts, techniques, specifications.
- Reports and documentation.

Rauemi | Resources

- Programme guidance available from qualifications@waihangaararau.nz.
- Manufacturers' instructions and device specification sheets relevant to the systems and equipment used for the task.
- Electricity Act 1992
- Electricity (Safety) Regulations 2010
- All vocabulary will align to the IEC 60050 International Electrotechnical Vocabulary (IEV) available at [IEC 60050 - International Electrotechnical Vocabulary](#).

Pārongo Whakaū Kouna | Quality assurance information

Ngā rōpū whakatau-paerewa Standard Setting Body	Waihanga Ara Rau Construction and Infrastructure Workforce Development Council
Whakaritenga Rārangi Paetae Aromatawai DASS classification	Engineering and Technology > Industrial Measurement and Control > Industrial Measurement and Control - Maintenance
Ko te tohutoro ki ngā Whakaritenga i te Whakamanatanga me te Whakaōritenga CMR	0003

Hātepe Process	Putanga Version	Rā whakaputa Review Date	Rā whakamutunga mō te aromatawai Last date for assessment
Rēhitatanga Registration	1	30 January 2025	N/A
Kōrero whakakapinga Replacement information	This skill standard replaced unit standard 2667.		
Rā arotake Planned review date	31 December 2029		

Please contact Waihanga Ara Rau Construction and Infrastructure Workforce Development Council qualifications@waihangaararau.nz to suggest changes to the content of this skill standard.